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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,428	06/10/2005	Steffen Weiss	PHDE020313US	5445
	7590 10/16/200 LLECTUAL PROPER	EXAMINER		
595 MINER RO	OAD	CATTUNGAL, SANJAY		
CLEVELAND, OH 44143			ART UNIT	PAPER NUMBER
			3768	
			MAIL DATE	DELIVERY MODE
			10/16/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Applica	tion No.	Applicant(s)		
Office Action Summary		10/538,	428	WEISS, STEFFEN		
		Examin	er	Art Unit		
		SANJAY	CATTUNGAL	3768		
 Period for	The MAILING DATE of this commur Reply	nication appears on t	he cover sheet with the	correspondence add	dress	
WHICH - Extension after SI - If NO period - Failure I Any rep	RTENED STATUTORY PERIOD F EVER IS LONGER, FROM THE Nons of time may be available under the provisions (6) MONTHS from the mailing date of this comprised for reply is specified above, the maximum storeply within the set or extended period for reply by received by the Office later than three months patent term adjustment. See 37 CFR 1.704(b).	MAILING DATE OF To sof 37 CFR 1.136(a). In no conunication. Eatutory period will apply and will, by statute, cause the a	FHIS COMMUNICATIOn event, however, may a reply be to will expire SIX (6) MONTHS from polication to become ABANDON	N. imely filed in the mailing date of this col ED (35 U.S.C. § 133).		
Status						
2a)⊠ T 3)□ S	esponsive to communication(s) file his action is <b>FINAL</b> . ince this application is in condition osed in accordance with the pract	2b) ☐ This action is for allowance excep	ot for formal matters, pr		merits is	
Dispositio	ո of Claims					
4a 5) □ C 6) □ C 7) □ C 8) □ C	-	re withdrawn from o				
10)⊠ Tr A R	ne specification is objected to by the drawing(s) filed on 10 June 200 pplicant may not request that any objected to a placement drawing sheet(s) including the oath or declaration is objected to	<u>5</u> is/are: a) accept ection to the drawing(s) g the correction is requ	) be held in abeyance. Se uired if the drawing(s) is ol	ee 37 CFR 1.85(a). bjected to. See 37 CF		
Priority un	der 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
2) Notice of 3) Informa	) of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (I tion Disclosure Statement(s) (PTO/SB/08) lo(s)/Mail Date	PTO-948)	4) Interview Summar Paper No(s)/Mail [ 5) Notice of Informal 6) Other:	Date		

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### **DETAILED ACTION**

# Response to Arguments

1. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1-7, and 11 and are rejected under 35 U.S.C. 102(e) as being anticipated by U. S. Patent No. 6,847,837 to Melzer et al.
- 4. Regarding Claim 1-7 and 11, Melzer teaches a system and method of determining the position of an object located in the examination area of an MR device, having the steps of generating high-frequency magnetic field in the examination area, which high-frequency magnetic field runs essentially parallel to a main magnetic field that is active at the same time, whereby a component of the high-frequency magnetic field that is perpendicular to the main magnetic field being produced from the high-frequency magnetic field by conversion means fitted on the object, in the vicinity thereof (Col. 6 lines 5-18, Abstract and Claim 1), detecting the nuclear resonance signal excited as a result of the perpendicular component of the high-frequency magnetic field, in conjunction with a gradient magnetic field (Col. 6 lines 5-18, Abstract and Claim 1),

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evaluating the nuclear resonance signal and determining the position of the object.

(Abstract and Claim 1)

- 5. Regarding Claims 8 and 10 Melzer teaches a catheter with coils. (Figs. 1a and1b)
- 6. Regarding Claim 11, Melzer teaches a first RF coil to radiate RF pulse perpendicular to main magnetic field (Col. 6 lines 5-18); and a second RF coil to radiate RF pulse parallel to the main magnetic field. (Col. 5 lines 10-20)

# Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 8. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U. S. Patent No. 6,847,837 to Melzer et al. in view of European Patent Application EP 0 768 539 A2 to Burl et al. (From the IDS)
- 9. Regarding Claim 1-7, Melzer teaches a system and method of determining the position of an object located in the examination area of an MR device, having the steps of generating high-frequency magnetic field in the examination area, which high-frequency magnetic field runs essentially parallel to a main magnetic field that is active at the same time, whereby a component of the high-frequency magnetic field that is perpendicular to the main magnetic field being produced from the high-frequency

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magnetic field by conversion means fitted on the object, in the vicinity thereof (Col. 6 lines 5-18, Abstract and Claim 1), detecting the nuclear resonance signal excited as a result of the perpendicular component of the high-frequency magnetic field, in conjunction with a gradient magnetic field (Col. 6 lines 5-18, Abstract and Claim 1), evaluating the nuclear resonance signal and determining the position of the object. (Abstract and Claim 1)

- 10. Melzer does not expressly teach the use of planar coils.
- 11. Burl discloses the use of planar coils. (Col. 1 lines 49-55)
- 12. It would have been obvious to one of ordinary skill in the art at the time of invention to modify Melzer with a setup to use planar coils as taught by Burl, since use of planar coils are well known in the art. Melzer uses spiral coils and any RF coil would serve the same function of position detection in the instant application, and different RF coils are obvious variants of each other.
- 13. Regarding Claims 8 and 10 Melzer teaches a catheter with coils. (Figs. 1a and1b)
- 14. Regarding Claim 9 Burl teaches that the coils are arranged in an angle other than 90 degrees. (Fig. 2 and Claim 10)
- 15. Regarding Claim 11, Melzer teaches a first RF coil to radiate RF pulse perpendicular to main magnetic field (Col. 6 lines 5-18); and a second RF coil to radiate RF pulse parallel to the main magnetic field. (Col. 5 lines 10-20)

#### Conclusion

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16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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- 17. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.
- 18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SANJAY CATTUNGAL whose telephone number is (571)272-1306. The examiner can normally be reached on 9:30 5:00 pm.
- 19. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on (571)272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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20. Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

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system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SPC

/Long V Le/

Supervisory Patent Examiner, Art Unit 3768